OWNER'S MANUAL

ELECTRONICALLY-TUNED AM/FM/MPX RADIO WITH AUTO-REVERSE CASSETTE PLAYER, CD CHANGER CONTROLS AND QUARTZ CLOCK

Model IM-500

SPS *SPECIAL PERFORMANCE SERIES*

OPERATING INSTRUCTIONS

RADIO AND CASSETTE CONTROLS

1 ON-OFF SWITCH/VOLUME CONTROL

Rotate this knob to the right to turn the radio on. Continue rotation until the desired volume level is obtained.

2 BASS CONTROL
TREBLE CONTROL (PULL)

Turn the knob clockwise to increase bass response, counterclockwise to decrease bass response. A detent click can be felt at the center of rotation. Similarly, the treble response can be adjusted by pulling the knob outward until it locks into position and then rotating it. Push the knob back in to return to the bass control position.

3 LEFT/RIGHT BALANCE CONTROL (PULL)

Pull this knob outward until it locks into outer position. Rotate it to the left or right to obtain the desired balance between left and right speakers. Push knob back in to return to volume control position.

4 FRONT/REAR FADER CONTROL

Rotate this knob to the left or right to obtain the desired balance between front and rear speakers in 4 speaker installations. When used in conjunction with the Left/Right Balance Control 3 , you have full 4-way stereo balance capability.

5 FM/AM BAND SELECTOR

Each time this button is pressed, the radio band is changed. The indication AM, FM1 or FM2 will appear on the display panel according to your selection.

6 & 7 MANUAL UP/DOWN TUNING
SEEK TUNING

To manually select a radio station, momentarily press the Up Tuning (⌃) button 6 to advance the unit one digit higher or the Down Tuning (⌄) button 7 to tune downward. Pressing either button for longer than 0.5 second will activate the Seek Tuning function and cause the radio to search for stations automatically. The radio will seek the next station and stop at that frequency. Continuing to hold either button will cause the radio to tune rapidly in the selected direction until the button is released.

8 AUTO-STORE TUNING (AS)
PRE-SET SCAN TUNING (PS)

During radio operation, press this button momentarily to scan the six stations pre-set into the memories of the AM band or the twelve pre-set memories of the FM bands. The unit will stop at each pre-set station for 5 seconds before continuing to the next pre-set station (the channel indicator number on the display panel will flash). Press the button again momentarily to stop the Pre-Set Scan operation and remain on the selected frequency.

Pressing the button for longer than 1 second will activate the Auto-Store Tuning, which will automatically scan the band and enter up to six strong stations into the pre-set memory positions of that band. If you have already set the pre-set memories to your favorite stations, activating the Auto-Store feature will erase those stations and enter the new strong stations. This feature is most useful when traveling in a new area where you are not familiar with the local stations.

9 STATION PRE-SET MEMORIES

To set any of the 6 pre-set memory buttons, use the following procedure:

1. Turn the unit on and select the desired band.

2. Select the first station to be pre-set using the Manual Tuning 6 & 7 or Seek functions.

3. Press the pre-set button to be set and continue to hold the button in. The volume will be muted for aproximately 2 seconds and then return. The station is now set into that pre-set button. To recall that station, press the button momentarily.

4. Repeat the above procedure for the remaining 5 pre-sets on the band and for the other 2 bands of the unit.

bl LIQUID CRYSTAL DISPLAY PANEL

The Liquid Crystal Display (LCD) panel displays the frequency, time and activated functions.

NOTE: It is a characteristic of LCD panels that, if subjected to cold temperatures for an extended period of time, they will take longer to illuminate than under

normal conditions. In addition, the visibility of the numbers on the LCD may slightly decrease. The LCD read-out will return to normal when the temperature increases to a normal range.

bm CASSETTE DOOR

Hold the cassette with the exposed tape edge to the right and insert into the cassette door. Depress fully until the cassette is engaged and begins playing. When the cassette reaches the end of the side of the tape being played, the unit will automaticvally change direction of play as shown by the arrow indication on the display panel and play of the other side of the cassette will begin.

NOTE: Observe cassette operation Cautions in Care and Maintenance section of this manual.

bn FAST-FORWARD BUTTON (FF)

Pushing the Fast-Forward button will cause the tape to move rapidly in the forward direction of play. To stop Fast-Forward movement, lightly push the Rewind Button bo until the Fast-Forward button disengages.

bo REWIND BUTTON (REW)

Pushing the Rewind button will cause the tape to move rapidly in the reverse direction of play. To stop Rewind movement, lightly press the Fast-Forward button bn until the Rewind button disengages.

bp PROGRAM SELECTOR

To manually reverse tape direction and play the other side of a cassette, lightly press both the Fast-Forward bn and Rewind bo buttons at the same time. The change of direction will be shown by the arrows on the LCD panel.

bq EJECT BUTTON

Tape playback is stopped and the cassette is ejected by pressing this button, which also has the function of switching over to radio operation.

br MODE SELECTOR

This button is used to select the audio source in play. During tape play, it can be used to change to radio play without ejecting the cassette. Similarly, it can then be used to go back to tape operation from radio play.

NOTE: To prevent damage to cassette tape and/or mechanism, it is recommended that the cassette be ejected if it will not be played for prolonged periods.

bs TIME/FREQUENCY SELECTOR (T/F)

During radio operation, push this button to call the time display on the incorporated quartz clock. Pressing the button again will return to frequency display.

During CD changer operation, push this button to call the time display or return to the disc and track number indications.

bt RE-SET BUTTON

A re-set button is located on the front panel which must be activated by a pen tip or other thin object as it is recessed to prevent accidental engagement. The re-set circuitry is provided to protect the microprocessor circuitry and should only be activated under the following circumstances as it will erase the time and station pre-set memories.

1. Upon initial installation after all wiring is completed.

2. If there is a malfunction of any of the switches on the unit, pressing the re-set button may clear the system and return to normal operation.

SETTING THE CLOCK

1. Switch the vehicle ignition on and the radio on .

2. If the radio frequency is shown on the LCD panel bl , press the Time/Frequency Selector (T/F) bs momentarily so that the time display is shown.

3. With the time display on the LCD panel, press and hold the Time/Frequency Selector (T/F) bs, for approximately 2 seconds until the time display begins flashing.

4. Within 5 seconds of the display beginning to flash, press the Down Tuning (∨) button 7 to adjust the hours, then the Up Tuning (∧) button 6 adjust the minutes to the correct time.

5. After setting the correct time, press the Time/Frequency Selector (T/F) again or wait 5 seconds for the display to stop flashing.

CD CHANGER CONTROLS

Built into this radio are controls to operate an optional 10-disc or 6-disc CD changer. Please check with your SPS/Audiovox or Prestige car stereo specialist for recommendations of the models that will work with this radio.

Adjustment of audio functions (volume, tone, balance, and fader) operate in the same manner during CD play as they do for radio/cassette play. The following controls will operate the CD changer when it is installed and connected to this radio. Refer to the owners manual included with the CD changer for instructions on the installation and correct loading and use of the CD magazine.

bu MODE SELECTOR (MODE)

With the CD changer connected to the unit, this button is used to select CD changer operation. To choose CD mode, press the button until the DISC and TRACK indications appear on the display panel. Press the Mode button again to change back to radio or tape operation.

cl & cm DISC SELECT (D+) (D-)

These buttons are used to select the desired disc for play. To advance to a higher number disc, press the D+ button cl . To return to a lower number disc, press the D- button cm . The number of the disc in play will be shown on the display panel.

cn & co TRACK SELECT (TRC⌃) (TRC⌄)

These buttons are used to quickly select the beginning of a particular track. Tap the Forward Track Select (⌃ cn or Backward Track Select (⌄ co to locate the desired track as shown by the track number on the display panel.

cp & cq CUE/REVIEW FUNCTIONS⌃) (⌄)

High-speed audible search to any section of the disc can be made by the Cue and Review functions. Press and hold the Cue (⌃ button cp to advance rapidly in forward direction or the Review (⌄ button cq to advance rapidly in the backward direction.

When the Cue (⌃ button cp is held down and the end of the last track on the disc is reached or the Review (⌄ button cq is held down until the beginning of the first track is reached, the unit will enter the Pause mode (▶▮◀) will flash on the display panel) until the button is released.

cr PAUSE SELECTOR (PAU)

Pressing this button will temporarily stop play of the disc (the ▶▮◀ indication will flash on the display panel). Press the button again to resume play of the disc from the point at which it had stopped.

cs TRACK/DISC SCAN (SCAN)

When the Scan button cs is pressed, the SCAN indication will appear on the display panel and the first 10 seconds of each track on the disc will be played in order. When a desired track is reached, press the Scan button cs again and play of that track will continue (SCAN will disappear from the display panel). The Track Scan mode will also be cancelled by activating any other disc function (Select, Cue, Review, Shuffle or Repeat).

When the Scan button cs is pressed and held longer than 2 seconds, the DISC and SCAN indications will appear on the display panel and the first 10 seconds of the

first track on each disc will be played. When a desired disc is reached, press the Scan button CS again and play of the disc will continue (DISC and SCAN will disappear from the display panel). The Disc Scan mode will also be cancelled by activating any other disc function (Select, Cue, Review, Shuffle or Repeat).

Ct TRACK/DISC REPEAT (RPT)

When the Repeat button Ct is pressed, the RPT indication will appear on the display panel and play of the selected track will be continually repeated until the Track Repeat mode is cancelled by pressing the Repeat button Ct again or by activating the Scan CS or Shuffle CU functions (RPT will disappear from the display panel).

When the Repeat button Ct is pressed and held longer than 2 seconds, the DISC and RPT indications will appear on the display panel and play of the selected disc will be continually repeated. The Disc Repeat mode can be cancelled by pressing the Repeat button Ct again or by activating the Scan CS or Shuffle CU functions (DISC and RPT will disappear from the display panel).

CU TRACK/DISC SHUFFLE (SHF)

When the Shuffle button CU is pressed, the SHF indication will appear on the display panel and the tracks on the disc will be played in a random, shuffled order. The Track Select buttons Cn and Co will also select tracks in the shuffled order instead of the normal progression. The Track Shuffle mode can be cancelled by pressing the Shuffle button again or by activating the Scan CS or Repeat Ct functions (SHF will disappear from the display panel).

When the Shuffle button CU is pressed and held longer than 2 seconds, the DISC and SHF indications will appear on the display panel and the discs in the magazine will be played in a random, shuffled order as well as the tracks on each disc. When all the tracks on the selected disc have been played, the next disc will be chosen in shuffled order and its tracks will be played in shuffled order. The Disc Shuffle mode can be cancelled by pressing the Shuffle button CU again or activating the Scan CS or Repeat Ct functions (DISC and SHF will disappear from the display panel).

ERROR SIGNS

If a problem should develop while operating the CD changer, the following error sign indications may appear on the display panel.

E:01 Indicates abnormal disc changer function. Consult your car stereo specialist or service facility for further assistance.

E:02 Indicates excessive temperature conditions. The error sign will go off and play will resume when the changer temperature returns to the normal range.

E:07 Indicated disc may be loaded in the magazine upside-down. Re-load disc properly if necessary. May also indicate that the disc is dirty in which case, clean the disc and re-load it. If this does not restore correct operation, consult your car stereo specialist or service facility for further assistance.

- - - Magazine is not loaded in the changer.

0 0 0 No discs are loaded in the magazine.

1:- - No disc is loaded in magazine tray #1. (2:- - indication for tray #2, etc.)

CARE AND MAINTENANCE

The radio portion of your new sound system does not require any maintenance. We recommend you keep this manual for future reference on how to set the clock and for general reference of the many features found in this unit.

As with any cassette player, the cassette section of this sound system does require a minimum of maintenance to keep it in good working condition. The following simple care and maintenance suggestions should be followed to prevent malfunctions of the cassette system.

CASSETTE CARE:

1. Purchase a cassette cleaning kit from your local retail store. Use it! At least every 20 to 30 hours of operation you must clean the cassette mechanism. A dirty cassette player will have a poor sound.

2. Do not use cassettes that exceed 45 minutes of play on each side.

3. Do not insert a cassette that appears to be broken, twisted or dirty or with loose or torn   labels on it.

4. Always keep your cassettes away from direct sunlight or exposure to sub-freezing conditions. If a cassette is cold, allow it to warm up before use.

5. Do not keep a cassette in the player when not in use.

6. Before inserting a cassette in the player, check that the tape is tightly wound on the reels. Take up any excess slack using a pencil to turn the drive hub in the cassette (see diagram below).